

ABSTRACT

The present invention is provided to form a trench in a semiconductor device, wherein by performing an ion implanting process to an area of a semiconductor substrate in which the trench would be formed to cause lattice defects in the area before forming the trench, an etching speed of the area is increased in subsequent trench forming processes. As a result, it is possible to prevent micro trenches from being formed in edge portions of patterns and to suppress a micro loading effect to be generated depending upon pattern sizes.